Interim Evaluation of the North Central Regional Educational Laboratory
Synthesis Report

I. Brief Overview …Of the Laboratory

The North Central Regional Educational Laboratory (NCREL) is described by its director as an “adolescent Laboratory." First funded by OERI in 1985, it has been refunded through two additional cycles in 1990 and 1995. NCREL serves a region that includes Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin, i.e. the relatively homogeneous midwest. The region contains 20 percent of the country's population, 20 percent of the its school-aged youth, and 25 percent of its public schools. The Laboratory began with a budget of a million and a half dollars and a staff of 25. For FY 1998, its budget was 16 million dollars, of which 78 percent is provided by Congress, while 22 percent comes from state, local, and foundation/private funding. The Lab now has a staff of about 120 people, most of whom are housed in an office building in suburban Chicago.

NCREL is organized into four separate but interconnected centers and has one specialty area, which is technology. (Laboratory specialties are specified under the current RFP. For NCREL, the choice of technology Lab was a natural outgrowth of the emphasis they have traditionally put on the use of technology to serve the region). The centers are: the Center for Teaching, Learning and Curriculum (CTLC); the Center for School and Community Development (CSCD); the Center for Scaling Up; and the Evaluation and Policy Information Center (EPIC). NCREL has six published goals:

1. Provide design consultation to schools and communities
2. Identify exemplary programs and resources in critical content areas

3. Contribute to and study strategies for moving educational innovations scale

4. Provide national leadership in promoting the use of technologies to improve learning

5. Establish NCREL as a leading regional resource for network and policy

6. Establish NCREL as a leading regional resource for professional development

... Of the Activities

The six-person peer review panel visited NCREL during the week of April 25, 1999. The NCREL Interim Evaluation site visit team was comprised of a six-member panel: Nancy Brigham, (panel chair, Partner/Independent Consultant, Rosenblum-Brigham Associates Weymouth, MA); Nancy Clark-Chiarelli, (Senior Research Associate, Education Development Center, Newton, MA); Marilyn Willis Crawford, (Research Assistant, Peabody College of Vanderbilt University, Hickory, KY); Andrew Hayes (Associate Professor, University of North Carolina at Wilmington); Wilfred Johnson, (Chair, Department of Curriculum, Howard University, Silver Spring, MD); and John Nash, (Associate Director, Stanford Learning Laboratory, Stanford University, Stanford, CA). Team members reviewed Laboratory materials extensively both prior to the visit and as a natural part of the flow of work during the site visit. The agenda consisted of a mix of presentations around the signature works, visits to schools, discussion periods with Lab staff and time for peer review panel interaction and reflection. The signature works considered by the peer review panel are *Design Support for School Improvement* and *Technology for Teaching and Learning*.

The review panel brought many perspectives to bear on the work of the Lab and was an effective mechanism for examining its work. However, in some ways it is analogous to a group of people in a rowboat drifting past an iceberg and attempting to evaluate not only the eighth they can see, but also the seven-eighths below the surface.

II. Implementation and Management

A. To what extent is the REL doing what they were approved to do during their first three contract years?

Strengths

NCREL has conducted the activities described in their contract, and has reported to OERI modifications made during the contract period. These modifications appear to be clearly justified by events outside NCREL's control, shifts in priorities supported by OERI, or to take advantage of opportunities that arose. When changes have been made, care has been taken to provide justification, as demonstrated through the filing of updates (such as the FY99 Scope of Work Update to the Amendment to NCREL's Technical Proposal). Timelines appear to be generally adhered to and the REL seems to be on a trajectory that would allow them to complete their planned scope of work during this contract period. For example, the activities summarized in the 1st Quarter Report of FY '99 go beyond the expected accomplishments outlined in the "Activities Planned for the Next Quarter" in the 4th Quarter Report of FY '98.

Panelists felt that NCREL has done a commendable job leveraging funds and staff to support the scope of work as reported in their report of total funding as of November 1998. Monies from sources such as the DOE Math and Science Grant, DOE NCRTEC Grant, Department of Defense, and the Chicago Public Schools, complement OERI funding and contribute to a cohesive stream of work. Further, the Lab has done a good job of incorporating additional grants into their center structure, thus making it possible to provide a seamless approach to getting the work done, no matter the funding source.

The Lab appears to have an established system of strategic alliances with bodies such as regional CSSOs, state governors and legislatures, and advisory networks (e.g., National Rural

Education Association and Urban Education Network). NCREL has also recently partnered with institutions of higher learning around integration of their *Learning with Technology* course in the preparation of preservice teachers as described during our site visit. The strength of their networks and strategic alliances was supported by the Board of Directors during our teleconference, many of whom represent these partnerships. Throughout the visit, there was evidence of strength and commitment, a climate of thoughtfulness, and an everyday norm of cooperation and positive working partnerships across the organization.

Areas of Needed Improvement

In general, panel members were satisfied that the Laboratory is doing what they said they would do during the contract period. There were two issues raised by individual panel members. Excerpts from individual reports appear below.

> *Th(e) work is hampered by the disconnect between the broad, sweeping focus of the national Lab work – making connections in a meaningful way and informing the daunting issue of moving reform to scale – and the five-year cycle of Lab work. Educational change at this level requires a longer cycle of effort and persistent focus.*
>
> *The teacher voice on the Board of Directors could be stronger. It is unclear how the Teacher Advisory Board identified in the Response to Technical Questions interfaces with the Board of Directors. In addition, the Board of Directors appears to have a rather uncritical stance toward the REL... it was surprising to hear during our teleconference that Board members felt that there are <u>no</u> problems with the Lab scaling up their work given that the Lab has identified the challenges in this work.*

Recommendations for improvement

The panelists who raised these issues also made some suggestions about improvement.

> *Explore options for partnerships and opportunities to extend the focus of the Labs work beyond the five-year cycle, with the five-year span in context of a larger*

strategic view of the issues of connectedness and scaling up. Deliberately shift focus for the last part of this contract to scale up issues of both delivering products and services out and issues of consumer use on a broad scale. Focus deliberately on the products and processes already developed or firmly underway, looking in great depth and with a researcher's eye at how to move them to scale by increasing their potential to connect with consumers in context of the practitioner's reality.

The Board of Directors should help NCREL to think about issues of scaling up. It would also seem advisable to have the teacher advisory board directly linked to the Board of Directors.

B. To what extent is the REL using a self-monitoring process to plan and adapt activities in response to feedback and customer needs?

Strengths

Several topics are included under this header. First, the structure of the Lab is discussed, then the specific responsibilities of the centers, and finally the specific quality assurances that guide the self-monitoring process.

The panelists were intrigued and sometimes puzzled by the Center structure employed by NCREL. Three panel members regarded the structure quite positively.

NCREL has developed and implemented a coherent organizational structure that focuses on internal connectedness and, as such, supports the organization in completing work they are approved to do in context of connections and scale-up. The centers have many cross appointments, which do not allow any of them to function as an independent silo. Individuals may be identified with a center, but are affiliated closely with the Lab.

The Lab is organized into four Centers that correspond to its major functions. Given the size of the total staff and the quantity and complexity of projects and tasks, some form of subdivision of the organization almost certainly is essential. This form seems reasonable. Care appears to be taken to have an overarching system for working that

engages staff from all the Centers in projects as their skills and services are needed. While there is an obvious identity of staff with their function, the Centers do not appear to be isolated in either their sentiments or work.

Several reviewers spoke warmly of the work of the Evaluation and Policy Information Center (EPIC). Of the four centers, it is the one most directly related to this question and its work is central to planning and managing all Lab projects. Indeed, a major determinant of the quality of work by the Lab is feedback from the monitoring processes. There is evidence in project evaluation reports and later versions of products or processes that the feedback from EPIC is actually used to make improvements.

Quality Assurance procedures are well-documented in the NCREL Quality Assurance and Evaluation document provided for the panel's review. In this document, the REL has identified the criteria and procedures for both external and internal reviews of products or written materials, including web-sites (3/18/99 Quality Assurance for Web-sites documents.) To be considered high quality, an NCREL product must: meet an identified need; have a clearly defined purpose and audience and a feasible dissemination and implementation plan; be delivered in a format and presented in a style that is useful to clients; represent the best available knowledge drawn from research and practice; adhere to high standards for useful, ethical, valid and reliable inquiry applied research and evaluation studies; promote balanced and positive portrayals of diversity in the use of photos, graphics, and textual components, and other components; and, conform to NCREL's editorial and technical standards.

An overall unifying theory drives the self-monitoring process. This framework is a customized TQM cycle with four major parts: Assessing Needs and Setting Goals; Designing Plan and Evaluating Alternatives, Implementing Plan, Evaluating Plan and Renewing Efforts. NCREL uses this framework to drive the collection of data and the refinement of activities

across the spectrum of work.

Additional mechanisms are in place to obtain feedback from internal and external parties to improve performance. In addition to documenting the review process for individual projects, NCREL undertakes a portfolio review with its Board of Directors. This review allows the Board members to review NCREL's entire portfolio of products and services, organized by the four centers. The Board evaluates the work of NCREL based on three overarching evaluation questions: Is NCREL doing the right work? Is NCREL doing the work it said it would do? Is NCREL doing its work well? The quality of NCREL products is also reviewed by clients via response cards included with all NCREL products.

NCREL surveyed its clients around issues of satisfaction of key products and services (March 1999 document). Overall, 87 percent of clients rated the quality of the product/service as excellent or good. About 87 percent rated the quality of planning of the product/service as excellent or good; 89 percent rated the timeliness of the product/service as excellent or good. Among clients, 87 percent rated the quality of the presentation of the product/service as excellent or good. As outlined in the NCREL Quality Assurance and Evaluation Document, external feedback is solicited from a variety of sources: through partnerships with R&D organizations, regional feedback from key client groups, and regional surveys of educators and agencies.

In addition, the panel heard directly from several people who have worked in various capacities with NCREL that the staff is receptive to feedback and very willing to make changes once they appreciate the need for them. For example, one higher education representative said that she had told NCREL staff that the Lab is not sufficiently well-known in the regional higher education community and that, as a result, she has been given a mandate by the Laboratory, to find ways to create greater name and reputation recognition through giving workshops, making

conference presentations, and the like.

Areas of Needed Improvement

Comments concerned the Lab's structure and one panelist questioned the data-collection process.

> *Given that projects cut across centers, it would seem important to have very well-established systems of communication. For example, the theme of engaged learning was identified in the presentation of the Technology Center has one of the most powerful "big ideas" to emerge from their work. Yet, when staff from CSCD were asked about the indicators of engaged learning, they were unable to respond.*
>
> *The organizational structure, while flexible may lead to stress within the organization as staff begin to have too many masters; potentially wear too many hats. Diffusion of treatment is an issue. Perhaps a new center devoted to training and delivery could increase fidelity of transfer, but this would be very expensive.*
>
> *A large part of data-collection regarding effectiveness or quality of products or services depends on surveys or questionnaires of various forms. Many of the items included in (the materials) are prone to distortion error from "social desirability" or "generosity" in responding. It is not clear that these two forms of error are taken into account routinely in either the design of the data-collection systems or in analyses and interpretation of responses. A significant proportion of the survey materials and approaches depend on voluntary response. Some of these have low response rates and are prone to returns that represent particular segments of the recipients – sometimes positive and sometimes negative, depending on the original relationship with the Lab.*

Recommendations for improvement

The panelists had several ideas for changes or modifications to the Lab's structures and the relationship among them.

> *Rethinking the structure. This, I think, should be based on three questions: (1) does the structure reflect the need to "put the pieces together"? (2) does the existence of a center called Scaling Up actually contribute to the success of doing scale up? (3) does the center structure really reflect the priorities of the Lab, including technology and professional development?*
>
> *The structure issue is complex because it reflects not only the priorities of the Lab, but the way they see themselves. My impression is of a relatively traditional hierarchical organization, which lacks the elements of cross-fertilization of ideas that create a learning community. Surely, if we are convinced that learning communities are the optimal way to undergird organizational change, it would be beneficial to reflect that conviction in the structure of an organization dedicated to facilitating organizational change.*

One panelist suggested some new approaches to the data collection process.

> *Account for "social desirability" and "generosity" in responding for all measurement processes that are prone to such error...Among methods might be triangulation or adoption of other forms of measurement... It appears that some of the resources given to "inspection" of processes and "results" could be used better if the original designs represented principles more grounded in technical or theoretical models.*

III. Quality

A. To what extent is the REL developing high quality products and services?

<u>Strengths</u>

The quality of the products and services provided by NCREL is generally high, although somewhat uneven. (One reviewer commented that the wider the intended dissemination and the more the product focused on technology, the higher its quality tends to be.) Certainly, there is a wide array of printed and web-based materials addressing a broad range of interests and target audiences. These materials include special papers dealing with topics of immediate or critical

interest, regular publications covering general topics of interest, series publications dealing with single topics, publications that focus on particular audiences of policy-makers, administrators, trainers, teachers, or scholars, training materials, and web materials. for general information and training.

Certain products produced by the Lab seem to have "star" quality and attracted particular interest among panel members. Similarly, the process of development was seen as a real strength by several reviewers.

> *In the Every Child Can Succeed program with Chicago Public Schools, the literature on literacy and language acquisition of children speaking English as a second language is at the fundamental level and is skillfully woven into the design of the implementation. Much to their credit, NCREL has used this research to build teacher knowledge and understanding of language and literacy acquisition that is a key piece of professional development.*
>
> *The publication Plugging In is a successful, widely disseminated product devoted to choosing and using educational technology. The indicators of engaged learning are one of the real contributions that NCREL is making to the challenge of integrating technology into the curriculum.*
>
> *In the area of print materials, NCREL has an impressive library of works. NCREL's print library runs the gamut from draft academic papers to bound training materials, to glossy, magazine style reports. The overall quality of these materials, as reviewed by this panelist, appears to be very high. In cases where I was able to obtain background information on the development process for certain materials, such as the leadership training modules for technology, developed in conjunction with the Chicago Academy for School Leadership (CASL), the Lab appears to have gone to great lengths to solicit key stakeholder input in the development process.*
>
> *The concept of "engaged learning" (is) a powerful conceptual framework for reconceptualizing high quality teaching and learning on a broad scale. The engaged*

learning concept encapsulates changes in both the role of student as active participant in learning and in the role of the teacher as coach and facilitator rather than as disseminator of wisdom. This concept appears to be strongly infused into the vernacular at the teacher, school, district, and state (Illinois) levels, with indication that the concept is moving throughout the service region -þ a major positive factor in the scale-up potential of the products and services being created. It was evident at the sites visited and through focus groups and interviews that teachers and administrators actively use the construct in rethinking learning and teaching in their daily work. It is serving as a powerful organizer for core level school change. This paradigm shift is phenomenal: it reaches directly into the classroom with a powerful metaphor that makes major changes in conceptualization of learning and teaching.

Using the concept of engaged learning, NCREL has developed a number of strong products and processes. CTLC and CSCD have focused in particular on the teachers' role in delivering instruction and in understanding how students use that delivered instruction to learn, with products such as the Engaged Learning Safari offering educators clear benchmarks for understanding engaged learning and with potential for scale-up inherent in the product.

The Engaged Learning Safari teaches teachers research to practice techniques and how to infuse these results into the curriculum þ mathematics, science, literacy and the inter-disciplinary learning. I especially want to identify one product that I thought was stellar: Gateway Concepts. This product is based on empirical evidence of need. It is standards-based. It is user friendly and is incredibly generative in terms of where a teacher can take it. It is clearly a vehicle for professional development that supports engaged learning in classrooms. Very impressive! I also want to recognize Learning with Technology for its contributions to teacher professional development in technology, yes, but also for its power in reshaping teachers' thinking about their practice. The message in the program is that technology is a tool to engage students in learning. I found it fascinating that teachers begin to really "get it" – what problem-based learning is – when they use a tool that is a natural facilitator!

A set of "captured wisdom" has been developed and presented in CD format. These case demonstrations appear to have been carefully selected to illustrate the applications clearly and to demonstrate how they actually might be adopted or adapted. The production quality of the video and audio are good, and the application program...makes the materials easy to access and to move within.

The Captured Wisdom (cd) permits teachers to look at other learning situations and assist them in integrating best practices into their classrooms.

Areas of needed improvement

Although, as the preceding paragraphs attest, the panelists thought that much of the work of the Lab is of very high quality, most of them did find some areas for improvement.

The concept of "engaged learning" is not as highly visible in the products, processes, publicity, and dissemination processes that will let the Lab move the concept to scale. The concept is there in the materials and processes, but it is not "front and center" as it seems to be in the field. There is opportunity lost for making this amazing paradigm shift on a broad scale and for creating positive ethos related to concepts of constructivist learning and radical change in teaching delivery systems as well as student roles. Pulled to the front...the concept of engaged learning could be a powerful tool for scaling up...

...(T)he Pathways server has a number of quality issues... addressed. In attempting to serve the needs of a broad audience, the product fails to maintain high enough quality for the empirical research world or to be user-friendly enough to serve teachers in their world, and it has not kept pace with changes in the technology field as well as with issues of effective web-based communication strategies. Specifically, the research articles in particular have definite limitations that make them unfriendly both to researchers and to practitioners: Many contain citations in context of text but lack a reference section at the end of that text. Many of the literature reviews have obvious gaps and fail to cover the literature thoroughly or evenly. The reviews are written with authority and certitude rather than with the tentativeness and conflict that is a natural part of the emerging nature of knowledge construction and thus

some of the research reviews tends to take on an editorial slant, The overall writing styles are formal and unfriendly to a non-researcher audience, and best practice exemplars and empirical research is blended rather than clearly delineated, sending an overall message of authority and expertise when it is not necessarily supported empirically.

Research findings in depth remain relatively inaccessible to people in the field, with the exception of broad translations in the form of reviews...Although there are bibliographies and reference lists available on the web-site, hand-delivered through the resource center, and incorporated as part of written materials, the information in these listings remains virtually inaccessible to consumers unless they expend considerable time, energy, and resources to filter through the list and then go out to obtain the sources.

Making Good Choices appeared to have some limitations in terms of its implementation. A question such as: "How effective is your school's curriculum?" seems straightforward but is actually at the heart of systemic reform. The tool may be a wonderful springboard for professional development and rich conversation among school faculty and administration. I am not sure that it can be used that easily to make good choices about models of comprehensive school reform without a facilitator laying a lot of ground work.

In reviewing the literature base for implementation of Every Child Can Succeed, I failed to see reflected important findings from seminal works in literacy that extend beyond those important domains described in the previous section. For example, the 1998 NCR publication Preventing Early Reading Difficulties emphasizes the need for an end to the "reading wars" and a polarization of approaches. Young children need a balanced program. The findings on phonemic awareness and the need for systematic and sequential opportunities for students to work with alphabetic principles to develop grapho-phonemic, as well as semantic and syntactic cueing strategies, are not included in works cited. This is particularly of concern when working with K-3 schools. Moreover, while I think the STRP has strength as a program for improving reading, I do not believe it is a balanced program for young readers, K-3.

I heard that EPIC is looking over notes from the site work, but it isn't clear to me that the design for evaluation has been built in as a key component of the work to scale up. What is the level of implementation of the various interventions? Especially if multiple interventions are introduced, it is critical that fidelity of treatment be monitored to understand potential student outcomes.

The Lab has made a heavy commitment to a process of "co-development" of its processes and services with its clients. While that approach has much to recommend it, there are some serious potential weaknesses that can result from implementation that does not have some deliberate method for introducing and assuring use of the best technical and theoretical information into design decision-making. This appears to be an important point of quality "slippage" in Lab projects. None of the responses made by Lab staff during the site visit revealed an overarching technical or theoretical approach to co-development.

While the Lab seems very successful in responding to requests for services, there does not appear to be an overarching strategy for initiating services for those who are not inclined to request it.

Although there are bibliographies and reference lists available on the web site, hand-delivered through the resource center, and incorporated as part of written materials, the information in these listings remains virtually inaccessible to consumers unless they expend considerable time, energy, and resources to filter through the list and then go out to obtain the sources. Lists of sources alone are inadequate in communicating research findings, and there are broad web-based and electric resources readily available that are not part of NCREL's web sites or services.

Recommendations for improvement

Panelists made suggestions they believe will improve the product quality.

Use the concept of Engaged Learning as a major organizer for products and processes. This is a powerful construct that has potential to make major impact in the field, and it needs to be "pulled front and center" and used as an organizer for the web page, as a conceptual framework that links NCREL products and processes into a seamless, readily-understood conceptualization of overall change in

classrooms, schools, states, and regions...(U)se it more deliberately and extensively.

Capitalize on the potential strength of Pathways, even though it is not a "new" product. Pathways has strong name recognition and numerous visitors almost a "brand name" strength – and it offers strong possibilities for maintaining cutting edge information. First, clearly identify your audience and create top quality work targeted to that group...It might be strengthened by tailoring it to a more narrow audience such as curriculum planners and students in pre-service courses, curriculum planners, and others...the research reviews need to be comprehensive and current, and citations need to be included with more information readily available on each article. All major perspectives should be included, even where there are disagreements and knowledge gaps...

Consider supporting references and bibliographies with another layer of available information. For example, the Resource Center might create annotated bibliographies for all sources cited using summaries of findings such as those found in ERIC, rather than simply listing sources.

While STRP is a program that I might recommend for grades three and above, I would strongly encourage NCREL to revisit the decision to broker (this) program to K-3 schools...A balanced program for early reading instruction must be more inclusive than the scope of this program.

Develop the initial designs for Lab processes that represent more powerful technical or theoretical models than ones now used, and adopt a strategy for "scaling up" that actually represents what is already known in that field. Related bodies of information are well established in the areas of, among others, innovative and incremental change, instructional-systems development, small-group structures and change, role theory, motivation theory, some economics theories, "critical mass" theory, and culture and climate.

NCREL is moving from print documents to audio-video as shown in utilization statistics compiled by NCREL. For example, in 1997, the number of print products distributed to clients was 131,093; in 1998, that number went down to

107,686. These statistics were matched by a corresponding increase in the distribution of audio/video/cd products. However, documentation is still not informative enough...while they can document the number of hits on the web-site, they cannot document the number of people these hits represent, nor the usefulness of the web-site--except through individual testimony.

Recommendations for Improvement

The Lab is already taking steps through an on-line survey to address issues around their web-sites. As to their surveys and assessment instruments, they are hamstrung in a sense by needing to provide some kind of help for schools in their region without having the resources to do the job in any depth. The panelists suggest they revisit some of their tools and match them more closely to the capacity of the people who will be using them.

IV. Utility

A. To what extent are the products and services provided by the Laboratory useful to and used by customers?

Strengths

In the 1995 Gallup Survey of a random sample of educators in the NCREL region, respondents were asked to rate the usefulness of services and products received from NCREL. A little less than half (45 percent) rated violence and substance abuse prevention and early childhood (45 percent) as very useful. Other areas rated as very useful include professional development (32 percent), curriculum (37 percent), and assessment (33 percent).

Lab staff appears to do everything they can to ensure that their products are useful, ranging from careful needs-sensing as the basis for developing products and services to modifying and customizing products and services based on feedback from the field. Panelists are convinced that the work of the Lab is very useful to the field and, to the extent it could be

judged, they were positive about evidence of use.

> *One major external partnership, with which the panel became quite familiar is that with Chicago Public Schools. Replying to an RFP in 1998, NCREL became an external partner with 11 elementary schools, which were on probation for low achievement. The usefulness of the work done by NCREL staff in this role is attested to by the fact that six of the schools are now off probation because of improved performance on standardized tests. Two of the partnered schools were recognized by the district for the "most improved" scores -- one in writing and one in science. NCREL also supported five of the schools in developing CSRD grant proposals and all were selected as grant recipients. NCREL is helping to develop a learning framework at Brentwood, another of its CPS partners in which technology provides support to instruction, and is not merely an end in itself; NCREL's presence in the school has fostered an attitude of learning and exploration with technology among the staff and students. Also, at Brentwood, email is used as a questioning method in lieu of classroom visitations, due to time constraints teachers have. Evidence suggests this is an effective way to dialogue with teachers regarding practice.*
>
> *A key feature of the efforts to improve instruction in the region is the focus on "engaged learning". For that purpose, the Lab has developed training programs and materials that are extremely "accessible" to teachers – making big changes in instructional practice but in ways that do not appear to be so difficult. The programs are efficient in amount of time required, yet still prepare teachers to begin using the approaches in important ways.*
>
> *The Lab has developed several web-sites that are emerging as key sources of information on topics important to the field of education, generally, not just in the region. These sites are cross-linked among themselves and with a number of other related sites. They are intuitively appealing and easy to access and use for information access and for more in-depth study of content.*
>
> *One of the strongest delivery systems for Lab products and processes in terms of consumer access and desirability – and thus potential for moving to scale -- is the use of courses as a delivery system. NCREL harnesses the power*

of the course structure to make products and services useful and used by customers in two ways: 1) the Lab has created, and continues to create, courses that can be used for in-service training and, and 2) the Lab has formed working partnerships with teachers in higher education so that Lab products and processes can be used in context of pre-service education courses. It is obvious from the quarterly reports that NCREL is capitalizing on this vehicle and is designing more courses as vehicles for moving products, processes, and information sources to scale.

Areas of needed improvement

The work with CPS was an area in which panelists saw need for improvement. The panelists also identified name recognition, gaps in service, fidelity of implementation, sustainability, and the specter of obsolescence. Individual reports are cited below.

With the Chicago Public Schools, example, NCREL is providing a package of services to 11 sites. The extent to which they can actually bundle services is dependent on: (1) the requirements of the contract they signed with the Chicago Public Schools, (2) the extent to which the frontline NCREL staff is familiar with all the services from all parts of the Lab, and (3) the extent to which the schools are receptive to a variety of services.

I have two questions about the intensive sites. Are the lessons they are learning generalizable or are they getting stuck in a school by school approach to systemic reform? Are the intensive sites black holes into which they will continue to pour resources without concomitant reward in adding to the knowledge base?

The Lab has been successful in serving people and systems in which conditions support change. It has not been so successful in developing that readiness throughout the region (i.e., in states other than Illinois and Ohio) and strategically providing services to develop readiness and then the support needed to follow through to adoption. There remain significant "gaps" in the region with sparse service and intensive impact from the Lab.

An area of concern is the sustainability of NCREL's impact after it pulls out of a project. NCREL staff spoke about the

challenges associated with the movement of products from the Lab to the field. They can point to specific cases where the product was introduced to a region through an SEA and "took off." They also pointed to other states or districts that had undergone the same training, but bore "no fruit."

An even greater challenge is the issue of fidelity. Again, this is an issue with which the Lab wrestles and has tried to maintain some control of the fidelity through the trainer of trainer model.

There is a need to specifically identify those schools that have probationary status...but may not have the necessary funding to pay for...services or materials to improve their status.

Recommendations for Improvement

Individual panelists identified some ways to improve areas they had targeted. Suggestions appear below.

As for some other issues addressed herein, there is a need for overall strategic view of how the mission of the Lab will be served in all areas of the region, especially to the level already apparent in some states.

There needs to be a more intense effort targeting schools in need of intensive implementation. These schools should definitely be targeted by including and assessing the building administrators regarding their impressions as to what they need to engage their teachers and students in teaching and learning. Each school staff should be involved in the specifics of what is involved in curriculum development and teaching. Training, wherever it is needed should include all members as a team. Mentors may be needed to model best practices.

As the Lab ponders scaling up, issues of utility, fidelity, and sustainability naturally arise. Are clients using the products? How are they using the products? Will they continue to use them when NCREL is no longer involved? I think the lessons learned from the Training of Trainers model in Learning with Technology are important. True, NCREL wants to get products out the door. But, unless the products tied to structures to which teachers have some

affinity and there is...shared investment in improving schools, the products probably remain under-utilized. NCREL has many strategic partnerships with solid track records that are clearly focused on reform. I would encourage NCREL to capitalize on and exploit those relationships (e.g., urban systemic alliance; rural systemic) and to be "selectively strategic" in their dissemination efforts.

B. To what extent is the NCREL focused on customer needs?

Strengths

NCREL places a clear emphasis on establishing need for their product or service and has developed an issues scanning system (Panel Presentation, April 28, 1999; Issue Scanning Development Document, December 16, 1998) that surveys needs in the field from a variety of sources, including: internal system, Resource Center requests, web-site hits, requests for proposals in the field, and specific requests for services. Individual reviewers chose to focus on different elements of the NCREL apparatus for focusing on customer needs.

The NCREL Resource Center handles all incoming field requests for information. As a special library within the DuPage Library System, the Resource Center is equipped to direct callers to appropriate materials, either developed by the Lab or by others. The Resource Center currently contains over 9,000 holdings.

In terms of setting priorities in accordance with customer needs, NCREL is adept at this, particularly in the development and delivery of custom, field-based interventions. At Cardenas Elementary School, the principal noted that NCREL staff work hard with the school and are considered more "coaches" than "consultants." Further, NCREL worked with Cardenas to determine the best program to address their reading and math deficiencies. Surveying the field, the school looked at the "Success for All" model, among others. Through their dialogue with NCREL, however, the teachers at Cardenas determined that the materials they had in place were fine. They decided that perhaps they weren't using the materials

properly. It was around this decision that NCREL began the process of crafting an intervention.

NCREL is explicit in its mandate to co-develop projects with field sites. Given hat is known about the glacial pace at which organizations change, early buy-in form stakeholders in the field is crucial. Some may argue that the co-development process dilutes the impact that a "purer" research based, clinical model may bring. However, any intervention that is "layered" upon existing organizational structures may fail without some level of co-development.

Areas of needed improvement

In this area, panelists identified some complex and deeply-rooted issues. These are reported below via excerpts from their reports.

A difficult task in determining needs from expressions is determining the need from the expression (Yes, that says what I meant.). Expressions usually are symptoms of something that may, or may not, actually be a need. The critical responsibility of the service provider is to determine the "actual" need that triggered the expressions. Here the issue is similar to the task of determining "root cause" of poor process performance in efforts for process improvement.

Outreach is often the fulcrum for promoting desire in a client who knows that there is a need, but who does not know or have the time for analyzing what the specific or general need(s) are.

The "lessons learned" from intensive sites have to be used to inform the work on scale up. Therefore, a major recommendation focuses on the need to make the link between the intensive work and scale up. While the intensive work does respond to needs from the field, I believe that those doing it have already learned some important lessons. One, often where a school or outside agency <u>thinks</u> the need is, isn't really where the need is. As in Senge's model of organizational change, where we think we need to "tweak" the system is often not the starting point. In work with CPS, NCREL learned that in order to address achievement in reading and mathematics, often

other systemic issues also have to be addressed (e.g., supervision of staff; professional development; home-school relationships; classroom management; school climate).

Recommendations for improvement

The panelists urged the Lab to rethink some of its activities, as shown below.

Use some of the experiences in the schools where there is intensive work to assess organizational...and other conditions that reveal needs at a more "fine-grained" level than the broad categories usually expressed in the surveys.

There needs to on-going "soul-searching" within the organization about the costs and benefits associated with responding to the many requests for services and products they receive. Clearly, NCREL must be responsive, but it must also be strategic.

NCREL wants to get products out the door. But, unless the products are tied to structures with which teachers have close affinity and some basis for shared investment in improving schools, the products probably remain under-utilized. NCREL has many strategic partnerships with solid track records that are clearly focused on reform. I would encourage NCREL to capitalize on and exploit those relationships (e.g., urban systemic alliance; rural systemic) and to be "selectively strategic" in their dissemination efforts.

(Be more) specific about how change will be sustained after field projects are over.

V. Outcomes and Impact

A. To what extent is the REL's work contributing to improved student success, particularly in intensive implementation sites?

Strengths

As part of the overall REL Performance Indicator process, NCREL surveyed its clients about the impact of key products and services on their instructional practice (March 1999

document). Overall, 74 percent said that the product/service increased their awareness of important new skills and knowledge, 53 percent reported they used the product/service to inform decision making and planning, and 50 percent said they used the product/service to change or enhance the quality of professional practices. Panelists noted the difficulty the Lab, or any such external partner, has in documenting attributable "student success".

> *At the intensive sites in the CPS system, the work of the Laboratory as an external partner was certainly one of the factors (and likely the major one) that resulted in six of the 11 schools being taken off probation because of the improvement in their test scores. This is one of few areas in which NCREL is working where they have the opportunity to demonstrate student success.*
>
> *While student outcomes (learning and achievement) are the ultimate (or distal) outcomes, it is often also helpful within the context of school reform to consider proximal outcomes: change associated with the practice of teachers and administrators. We heard from teachers and administrators that work with NCREL has changed how teachers teach and how instructional leaders do their job. The impact of NCREL's work in terms of student, or distal, outcomes is emerging. Achievement data supports positive change in student achievement in six of eleven Chicago Public Schools with whom NCREL worked (1997-98). Other outcomes are noted anecdotally by teachers in areas such as student engagement in learning and improvement in student attitude toward learning.*
>
> *At one school, the principal has become an instructional leader and is visiting classes. She herself credits NCREL for showing her that she is the instructional leader. Teachers talked about the benefits of the professional development they are receiving and how teaching Everyday Math has transformed their instruction in mathematics.*
>
> *At another school, both the teachers and principal enthusiastically described how work with NCREL has helped teachers reflect on instructional practices and collaboration. Teachers are designing units that engage students in inquiry and exploration of a topic to develop deep understanding of key concepts. Teachers are...asking*

students to take an active role in their own learning. One district administrator spoke very positively about NCREL's influence on his thinking and the district's stance toward engaged learning and technology.

(T)he bulk of the products and services created by the Lab are designed for consumption by trainers, or by teachers. These services and products, in the form of training, technical assistance, and print products (including web-sites and CD-ROMs) are often deployed in a setting that is rich with complementary (and sometimes competitive) reform efforts. This makes assessing impact more difficult, let alone understanding the relationship of NCREL products to increased student learning.

Areas of Needed Improvement

The panel was disappointed, although somewhat sympathetic, given the circumstances cited above, to read that on a survey (March 1999) of clients' perceptions of the impact of key services/products on student learning, only 23 percent of respondents said that the service/product positively affected student performance. Some specific areas that panelists felt might contribute to this concern are reported below.

I wondered about the unevenness of technology integrated into various intensive sites. If NCREL's specialty area is technology, shouldn't it be integrated into work across sites? When asked about this, NCREL staff replied that they felt it less needed since they had staff on-site. This, however, seems to beg the question. If technology is a powerful learning tool (which I believe it is) and NCREL has considerable expertise in this area, shouldn't it be a "value added" in schools working with the Lab?

Within the area of impact of student learning, the Lab must be able to demonstrate this on a wider scale.

It appears that NCREL staff who are participating in the interventions (at the intensive sites) are also serving as primary documentation collectors within those intensive sites. Thus, data is being collected on the site participants themselves, but there is little empirical evidence being collected on the researcher as subject.

Recommendations for improvement

Some panelists made specific recommendations. One made a plea for more and enhanced services.

1. *Reevaluate the integration of technology into services provided to schools*
2. *Design professional development services and products around the mentoring process for administrators...*
3. *(Commission) third-party evaluation of student achievement in sites where NCREL has made significant contributions to reform*

This is a tricky area for the Lab to address. In order to assess student learning on a broad scale, the Lab will no doubt be forced to analyze state-wide standardized test scores. The types of teaching and learning that the Lab promotes may indeed raise scores, but the direct link is nebulous, and literature suggests that standardized tests are a poor measure of the kind of learning occurring in engaged learning environments.

Study researchers themselves in context of practice. The work at intensive sites offers perfect opportunity for the research world to gain knowledge on researcher interventions in context of practice and whole school change. Consider having external researchers study NCREL staff on site to measure the impact of NCREL interventions on intensive site improvement and changes in student success that can be attributed to NCREL interventions.

Assist those underserved schools in writing proposals for funding or for partnerships. Direct attention to them so as to make them healthy institutions for children to learn. There should also be other resources to support collaboration in the schools currently receiving services, in the form of professional libraries and planning session along with all of the school staff.

B. To what extent does the Laboratory assist states and localities to implement comprehensive school improvement strategies?

Strengths

NCREL has been asked by its regional constituencies to play a major role in comprehensive school reform. The Center for Scaling Up in conjunction with other centers at the Lab responded to the first request from Wisconsin upon passage of the Obey-Porter Bill and worked with localities to obtain CSRD funds. Panelists referred to several instances in which the work of NCREL was instrumental in the implementation process.

> *NCREL worked with Illinois to try and develop a set of recommendations to address the following problems: (1) a drop in reading scores while math scores remained fair and consistent, (2) identification of the characteristics and the quality and consistency of the reading program, and (3) extent to which instruction, curriculum, and reading assessment is aligned. From this project, NCREL developed a core set of processes to guide districts and states in monitoring and changing a reading program.*
>
> *(T)he Center for Scaling Up delivers many products and services in ways that make them accessible to a wide audience. Other items of note in this area: The Lab serves as an information resource for states and localities through it's Resource Center and through it's policy documents; The Lab's Pathways web-site includes very useful information about comprehensive school improvement strategies; The Lab demonstrates a tendency to work "with" partners rather than "for" partners as evidenced by its wide network of partnerships across its seven state region.*
>
> *The Center for Scaling Up provides an explicit avenue for bringing successful projects to scale.*

Areas of Needed Improvement

Panelists primarily targeted the Center for Scale Up -- one commenting that the very name of it suggests that they have the answers about scaling up successfully, when in fact they are seeking the answers through multiple approaches, as described by one panelist.

> *Various obstacles in rolling out services on a larger scale have been identified by NCREL and their constituents whom the panel interviewed. NCREL staff spoke about the difficulties of working with intermediate state agencies in disseminating training to their teachers. In the case of Learning with Technology, the intent was to train these intermediaries to be the trainer of trainers. Unfortunately, a significant portion of those trained have not gone on to do subsequent trainings.*

Recommendations for Improvement

Panelists had some recommendations around the scaling up issue.

> *I would like to see the Lab staff look again at the model they have devised. Would it be useful to back off from trying to do scale up and spend more time trying to understand it theoretically or through some very small studies of it?*
>
> *Critical analysis of what happens to the effectiveness of project work once it is brought to scale and training is conducted by other agencies.*
>
> *Follow-up studies (perhaps several case studies) on the "life" of a product once it is brought to scale and "set free" in the educational marketplace*

C. To what extent has the REL made progress in establishing a regional and national reputation in its specialty area?

Strengths

NCREL has very high visibility within its region, at least among administrators. An estimated 80 percent of district superintendents and 67 percent of principals in NCREL's region have heard of NCREL (Gallup Survey, 1995). One reviewer commented:

> *NCREL has a strong focus on the use of technology to support instruction and learning...the Lab focuses its energy on harnessing the strength of technology for design of user-friendly products and processes, for dissemination on a broad scale in a cost-effective manner, and for broad, open access to information through technology.*
>
> *The Lab has extensive projects within its region, in partnership with others outside the region, and in partnership and coordination with other Labs. The DOD Education Activity for professional development in technology applications sends a strong message of support for the Lab's sound national reputation.*

Areas of Needed Improvement

Based on the results of the 1995 Gallup Survey of a random sample in the region, only 21 percent of teachers said they had heard of NCREL. The teachers may know the Lab's work under other terms such as through the popular work Plugging In, but they do not necessarily link that work with NCREL. The panel also heard from interviews that there is some tendency for states not contiguous to NCREL to feel somewhat marginalized.

Recommendations for Improvement

Reviewers focused on the visibility issue.

> *NCREL appears to work hard to gain visibility. As the use of technology increases in schools, I am optimistic that NCREL's viability will increase as well.*

Explore opportunities to expand name recognition among teachers. This "brand name" associated with quality products might offer a valuable tool in the process of scaling up, since name recognition is a factor in advertising and distribution.

VI. Overall Evaluation of Total Laboratory Programs, Products, and Services

The panel's overall evaluation of NCREL's Laboratory programs, products, and services is that is an extremely hard-working, creative, and capable organization that is generally healthy and quite productive. As in any organization, however, the question must be asked, is the organization able to leverage its human resources to the maximum? In terms of products and services, the Lab produces some outstanding work and some that deserves some careful reassessment. Based on our interviews with Lab staff, they are mindful of trying to understand what works in their products and services and what doesn't. For example, they have unpacked their successful product Plugging In to figure out why it works so well (apparently because it is not just about technology, but about the context and placement of technology) and to learn from it. Similarly, when they have experimented with the train the trainer approach, they have been attentive to what makes it work and why. In sum, the Laboratory does a lot of quality work and when they meet with setbacks, they work diligently to understand why and to do better next time.

VII. Broad Summary of Strengths, Challenges, and Recommendations

Strengths

NCREL is an organization that appears to be able to attract staff member who are articulate, enthusiastic, and very committed to their work. In fact, the present and "pending" executive directors very clearly identified the staff as a major resource of the organization. This

is no minor accomplishment and I think NCREL and its leadership should be congratulated. Since many of its strengths have been documented earlier in this report, the bulleted list below is at attempt to reiterate those that particularly impressed panelists.

- They have forged strong partnerships with external reform agencies and leverage monies very effectively from a variety of sources to supplement the OERI contract to build a cohesive and sustained stream of work.
- NCREL's willingness to "get into the trenches" speaks volumes to its commitment to understand and improve schools.
- Intensive field sites are a real-life context for research on practice.
- NCREL produces many high quality publications and products.
- The QA cycles in place are paramount and clearly evident.
- NCREL has built an impressive reputation among leaders at state and district both as a school reform agent, and a leader in technology.
- Their links with schools of education in the region and the inroads they have made into preservice teacher preparation are exciting.

Challenges and Recommendations

Many of the most salient of these have been discussed earlier in this paper. Here, the focus on a few issues that come with strong feelings from various panelists.

> *The issue of scale up is a thorny one. NCREL can make a tremendous contribution to this literature and to the systemic school reform movement in this area. After spending several days on site, I am wondering if the "collective wisdom" of the organization could be more utilized in regard to scale up. From the outset I have questioned why NCREL chose to create a center called "Scale Up" rather than have that function embedded within other structures. I think the Lab is making efforts to ensure connection between centers, but I question if the current organizational structure contributes to the understanding of this issue.*
>
> *Revisit the organizational structure of the Lab. The 4-phases of implementing projects require major*

interdepartmental efforts; NCREL itself has described how different departments interface around one project. What I heard from the presentations, however, was a process by which centers and departments became involved in projects in a sequential, rather than an interactive, manner.

As one contemplates bringing services and products to scale, it would seem critical that evaluation be ongoing and it seems this linear sequence may not harness the collective brain power of the organization. As a panelist I would not presume to prescribe an organizational framework, but I do recommend a fresh look at how NCREL operates as a learning community.

Intensive sites are wonderful opportunities for developing understandings of how change occurs. On the other hand, they can be incredibly labor, resource-intensive sites that bear very few results that can be used to scale up or to develop procedural knowledge about change. I believe that there is a danger for coaches and those working closely with the schools to become immersed in the technical assistance aspects of the work and have little time for the documentation, evaluation, and reflection that is critical. This is more of a caution than a deficiency.

The overall focus question I would pose is "To what extent are we using all the knowledge that is extant in this Laboratory to inform the direct services we provide to clients?"

The panel thanks the staff of NCREL for its hospitality and its cheerful tolerance of the disruption of regular work to meet our needs. We particularly appreciate the willingness of every staff member to face thorny issues and discuss difficult questions honestly and thoughtfully.